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Transportation and Land Use (TLU) Policy Options

Reduce VMT's Contribution to GHG Emissions (TLU Area 1)

TLU Area 1 is a suite of policy options aimed at reducing vehicle miles traveled (VMT) as a means of reducing GHG emissions in the transportation sector. Individual policy summaries in Area 1 follow.

Integrated Planning for Land Use and Location Efficiency (TLU-2).

• Implement integrated land use and transportation planning, investment incentives and other strategies to promote compact, transit-oriented development (TOD) and other growth management objectives that encourage less driving while ensuring a competitive economy and affordable housing opportunities. *Note:* "Maryland Transit Administration – Transit-Oriented Development" (HB 373/SB 204) enacted in GA08 supports this policy.

Transit (TLU-3).

• Shift passenger mode choice to transit and carpooling by improving transit service and expanding transit infrastructure through increased funding and planning, focusing development on transit-served corridors and expanding transit marketing and promotion. *Note: "Maryland Transit Administration – Transit-Oriented Development" supports this policy by promoting integrated planning and incentives for TOD throughout the state.*

Intercity Travel: Aviation, Rail, Bus and Freight (TLU-5).

• Enhance connectivity of non-automobile transportation modes between cities through infrastructure and technology investments, focusing in particular on rail expansion to reduce short-range air travel and to increase rail freight transportation.

Pay-as-You-Drive Insurance (TLU-6).

• The Maryland Insurance Administration (MIA) would lead a work group with MDOT, MDE, the insurance industry, consumer advocacy groups and other stakeholders to explore options for implementing and marketing insurance policies that tie the cost of premiums to miles or hours driven.

Bike and Pedestrian Infrastructure (TLU-8).

• State government would work with local governments and private stakeholders to develop infrastructure planning and design tools, and would provide financial incentives to local governments, to improve, expand and promote bicycle and pedestrian travel.

Incentives, Pricing and Resource Measures (TLU-9).

• Establish GHG emission-based road user fees, time-of-day cordon pricing, parking pricing, and fuel fees based on carbon-intensity, and use revenues to fund transportation programs that advance GHG reduction goals.

Evaluate the GHG Emissions from Major Projects (TLU-11).

 Require state agencies and other large capital project sponsors to conduct an evaluation of the resulting transportation and land use GHG emissions related to state and local major capital projects such as major road construction or modifications.

Reduce Carbon per Mile and/or per Hour (TLU Area 3)

Transportation Technologies (TLU-10).

• Reduce GHG emissions from on- and off-road vehicles (e.g. marine, rail, construction equipment) by providing incentives for purchasing fuel-efficient vehicles, adopting a "Green Port" strategy for Baltimore area port facilities, adopting state government contracting and fleet standards, and developing state-level "smart transportation" system management mechanisms.

Summary List of Draft Priority Policy Options for Analysis

Option No.	Policy Option	GHG Reductions (MMtCO₂e)			Net Present Value	Cost- Effective	
		2012	2020	Total 2008- 2020	2008- 2020 (Million \$)	-ness (\$/tCO ₂ e)	Level of Support
TLU Area 1: Reduce VMT's contributions							
TLU-2	Integrated Planning for Land Use and Location Efficiency	1.1	4.6	27.6	Large net savings		Unanimous
TLU-3	Transit	1.1	2.8	20.3	Large Net savings		Unanimous
TLU-5	Intercity Travel: Aviation, Rail, Bus and Freight	0.2	0.3	2.4	Net Savings		Unanimous
TLU-6	Pay-as-you-Drive Insurance	1.0	4.3	27.2	Net sa	Unanimous	
TLU-8	Bike and Pedestrian Infrastructure	Included in TLU-3 quantification				Unanimous	
TLU-9	Incentives, Pricing and Resource Measures	2.7	4.7	37.4			Unanimous
TLU-11	Evaluate the GHG Emissions Impacts of Major Projects	N/A					Unanimous
	Total of Individual Options	6.1	16.7	114.9			
TLU Area 2: Reduce carbon per unit of fuel							
TLU-4	Low Greenhouse Gas Fuel Standard	0.7	1.9	12.8	\$501.7	\$30-\$90	Bin 5
TLU Area 3: Reduce carbon per mile and/or per hour							
TLU-10	Transportation Technologies	0.40	0.44	4.17	\$4,091	(\$200)- \$1,500	Unanimous
	Sector Total Before Adjusting for Overlaps, Using ONLY the Area Totals	7.2	19.04	131.87			
	Reductions From Recent Actions	80.0	0.11	1.13			
	Sector Total Plus Recent Actions	7.28	19.15	133.0			

GHG = greenhouse gas; $MMtCO_2e$ = million metric tons of carbon dioxide equivalent; $$/tCO_2e$ = dollars per metric ton of carbon dioxide equivalent; VMT = vehicle miles traveled; N/A = not applicable.